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2/23/11

**Egg Drop Post Drop Analysis**

Our egg drop craft was successful. The egg did not break, nor did it have any cracks. The straws we used to create the outside of our cube worked well. We made the sides of the cube so that on impact, the pressure would be distributed equally throughout the craft. This way, it would have been more difficult to distort the cube. The criss-cross designs on the sides of the cube absorbed and distributed impact pressure well. We layered the straws to make the cube stronger. The straws were malleable and had some give and the plastic was able to conform for the fall. We used hot glue to attach the straws and create our cube. The dried glue added to the strength of our cube.

On the inside, we had a cradle made out of rubber gloves. There were two gloves that were stretched across the inside of the cube. We stuck the egg in between the two gloves so that the egg would be suspended inside the cube. Because the gloves were stretched and strong and were not too bouncy, the egg stayed perfectly still in the middle of the cube. For extra precaution, we wrapped rubber bands around the egg so that it would not fall out from in between the rubber gloves. We were surprised that the egg did not move at all, we thought there would have been a little bouncing inside the craft, but the gloves were pulled so tight that there was no movement at all. The components of our craft (straw cube and rubber glove suspension) performed as expected. Because of inertia, the egg still had momentum after hitting the ground, but the cradle prevented movement and absorbed the momentum of the egg from the fall.

Some other groups had similar designs to ours that included suspensions. One group in particular attached rubber bands all around the egg to suspend it in the middle of their cube. However, the rubber bands were so flexible that they pulled on the egg from all different directions and the egg completely shattered. Another group used a box of straws and stuffed it with felt pieces to cushion the egg and increase the impact time. This design was successful and the felt provided a good cushion for the egg. Another group used a cone shape. This was able to hold the egg nicely. A design that suspended the egg had to be carefully planned out for the egg to survive the fall. It could not have bounced and hit the top of the craft, nor could it have been stretched in all directions.